

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A computer system comprising:

a host computer for electronic conferencing with another computer;

a digital camera for picking up a scene with an image sensor and recording image data representative of said scene in a recording medium; and

a high-speed serial interface connecting said digital camera to said host computer;

said host computer comprising a device driver including: ~~having at least~~

a first device function for recognizing said digital camera as a storage driver, which records data representative of a still picture, and at least one of writing and ~~or~~ reading said image data at least one of in and ~~or~~ out of the recording medium; [[,]]

a second device function for recognizing said digital camera as an image device, which generates image data representative of a moving picture, and reading said image data out of the image sensor at a preselected period; [[,]] and

a third device function for recognizing said digital camera as an operating device and feeding an operation command to said digital camera;

said digital camera comprising a controller for driving, in response to an access made from ~~any~~ one of said first device function, said second device function, and said third device function ~~to third device functions~~ of said host computer via said high-speed serial interface, portions of said digital camera corresponding to said access to thereby control data transfer and a shooting operation,

wherein said high-speed serial interface comprises at least one of a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface,

wherein, when said high-speed serial interface comprises said USB serial interface, during an electronic conference between said host computer and said another computer, the image data representative of a still picture is transferred by said first device function using bulk transfer, which transfers image data at an idle position of a transfer frame, and

wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said host computer and said another computer, the image data representative of said still picture is transferred by said first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

2. (Currently amended) A system in accordance with claim 1, ~~wherein said high-speed serial interface comprises a USB (Universal Serial Bus) serial interface,~~

~~wherein the image data representative of a still picture is transferred by said first device function using bulk transfer, which transfers image data at an idle position of a transfer frame,~~

wherein the image data representative of a moving picture is transferred by said second device function using isochronous transfer, which transfers a preselected amount of data every preselected frame, and

wherein the operation command is transferred by said third device function using at least one of interrupt transfer and ~~or~~ control transfer, which transfers data when polling at a preselected period.

3. (Currently amended) A system in accordance with claim 1, ~~wherein said high-speed serial interface comprises an IEEE 1394 serial interface,~~

~~wherein the image data representative of a still picture is transferred by said first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle,~~

wherein the image data representative of a moving picture is transferred by said second device using isochronous transfer, which transfers data by seizing a channel every preselected transfer cycle, and

wherein the operation command is transferred by said third device function using said asynchronous transfer.

4. (Original) A system in accordance with claim 1, wherein said digital camera further comprises a speech input section for generating digital speech data representative of an input speech signal, and

wherein said device driver of said host computer further comprises a fourth device function for receiving said digital speech data from said speech input section together with the image data representative of a moving picture via said high-speed serial interface.

5. (Original) A system in accordance with claim 2, wherein said digital camera further comprises a speech input section for generating digital speech data representative of an input speech signal, and

wherein said device driver of said host computer further comprises a fourth device function for receiving said digital speech data from said speech input section together with the data representative of a moving picture via said high-speed serial interface.

6. (Original) A system in accordance with claim 3, wherein said digital camera further comprises a speech input section for generating digital speech data representative of an input speech signal, and

wherein said device driver of said host computer further comprises a fourth device function for receiving said digital speech data from said speech input section together with the image data representative of a moving picture via said high-speed serial interface.

7. (Currently amended) A system in accordance with claim 4, wherein said host computer further comprises a communicating section for interchanging data with another computer via a communication channel, and

wherein said computer system comprises ~~constitutes~~ an electronic conference system capable of sending at least one of the image data representative of at least one of a moving picture and ~~or~~ a still picture, and ~~and/or~~ said digital speech data received via said high-speed serial interface to said another computer via said communicating section.

8. (Currently amended) A system in accordance with claim 5, wherein said host computer further comprises a communicating section for interchanging data with another computer via a communication channel, and

wherein said computer system comprises ~~constitutes~~ an electronic conference system capable of sending at least one of the image data representative of at least one of a moving picture and ~~or~~ a still picture, and ~~and/or~~ said digital speech data received via said high-speed serial interface to said another computer via said communicating section.

9. (Currently amended) A system in accordance with claim 6, wherein said host computer further comprises a communicating section for interchanging data with another computer via a communication channel, and

wherein said computer system comprises ~~constitutes~~ an electronic conference system capable of sending at least one of the image data representative of at least one of a moving picture and ~~or~~ a still picture, and ~~and/or~~ said digital speech data received via said high-speed serial interface to said another computer via said communicating section.

10. (Original) A system in accordance with claim 1, wherein said digital camera further comprises a storage for rewritably storing system software assigned to said digital camera, and

wherein said device driver of said host computer further comprises a fifth device function for rewriting said system software via said high-speed serial interface.

11. (Original) A system in accordance with claim 7, wherein said digital camera further comprises a storage for rewritably storing system software assigned to said digital camera, and

wherein said device driver of said host computer further comprises a fifth device function for rewriting said system software via said high-speed serial interface.

12. (Original) A system in accordance with claim 8, wherein said digital camera further comprises a storage for rewritably storing system software assigned to said digital camera, and

wherein said device driver of said host computer further comprises a fifth device function for rewriting said system software via said high-speed serial interface.

13. (Original) A system in accordance with claim 9, wherein said digital camera further comprises a storage for rewritably storing system software assigned to said digital camera, and

wherein said device driver of said host computer further comprises a fifth device function for rewriting said system software via said high-speed serial interface.

14. (Currently amended) In a digital camera for picking up a scene with an image sensor and recording image data representative of said scene in a recording medium and operable under a control of an outside apparatus via a high-speed serial interface, said outside apparatus comprises ~~a device driver having at least:~~

a device driver comprising: ~~having at least~~

a first device function for recognizing said digital camera as a storage driver, which records data representative of a still picture, and at least one of writing and ~~or~~ reading said image data at least one of in and ~~or~~ out of the recording medium;

a second device function for recognizing said digital camera as an image device, which generates image data representative of a moving picture, and reading said image data out of the image sensor at a preselected period; and

a third device function for recognizing said digital camera as an operating device and feeding an operation command to said digital camera;

said digital camera comprising a controller for driving, in response to an access made from ~~any~~ one of said first device function, said second device function, and said third device function ~~to third device functions~~ of said host computer via said high-speed serial interface, portions of said digital camera corresponding to said access to thereby control data transfer and a shooting operation,

wherein said high-speed serial interface comprises at least one of a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface,

wherein, when said high-speed serial interface comprises said USB serial interface, during an electronic conference between said outside apparatus and another outside apparatus, the image data representative of a still picture is transferred by said first device function using bulk transfer, which transfers image data at an idle position of a transfer frame, and

wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said outside apparatus and another outside apparatus, the image data representative of said still picture is transferred by said first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

15. (New) A system in accordance with claim 14, wherein, when said high-speed serial interface comprises said USB serial interface, during said electronic conference between said host computer and said another computer:

the image data representative of a moving picture is transferred by said second device function using isochronous transfer, which transfers a preselected amount of data every preselected frame, and

the operation command is transferred by said third device function using at least one of interrupt transfer and control transfer, which transfers data when polling at a preselected period.

16. (New) A system in accordance with claim 14, wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said host computer and said another computer:

the image data representative of said moving picture is transferred by said second device using isochronous transfer, which transfers data by seizing a channel every preselected transfer cycle, and

the operation command is transferred by said third device function using said asynchronous transfer.

17. (New) A computer system comprising:

a host computer for electronic conferencing with another computer;
a digital camera for picking up a scene with an image sensor and recording image data representative of said scene in a recording medium; and

a high-speed serial interface connecting said digital camera to said host computer, wherein said host computer comprises:

first means for recognizing said digital camera as a storage driver, which records data representative of a still picture and at least one of writes and reads said image data at least one of in and out of the recording medium;

second means for recognizing said digital camera as an image device, which generates image data representative of a moving picture, and reads said image data out of the image sensor at a preselected period; and

third means for recognizing said digital camera as an operating device and for feeding an operation command to said digital camera,

wherein said digital camera comprises means for driving portions of said digital camera corresponding to said access, in response to an access made from one of said first means, said second means, and said third means of said host computer via said high-speed serial interface,

wherein said high-speed serial interface comprises at least one of a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface,

wherein, when said high-speed serial interface comprises said USB serial interface, during an electronic conference between said host computer and said another computer, the image data representative of a still picture is transferred using bulk transfer, which transfers image data at an idle position of a transfer frame, and

wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said host computer and said another computer, the image data representative of said still picture is transferred using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

18. (New) A system in accordance with claim 17, wherein said digital camera comprises means for generating digital speech data representative of an input speech signal, and

wherein said host computer further comprises fourth means for receiving said digital speech data from said means for generating, together with the image data representative of a moving picture via said high-speed serial interface.

19. (New) A system in accordance with claim 17, wherein said digital camera comprises means for rewritably storing system software assigned to said digital camera, and

wherein said host computer further comprises fifth means for rewriting said system software via said high-speed serial interface.

20. (New) A system in accordance with claim 1, wherein said electronic conference between said host computer and said another computer comprises a video conference.

21. (New) A system in accordance with claim 14, wherein said electronic conference between said host computer and said another computer comprises a video conference.

22. (New) A system in accordance with claim 17, wherein said electronic conference between said host computer and said another computer comprises a video conference.

23. (New) A method of communicating between a host computer for electronic conferencing with another computer and a digital camera for picking up a scene with an image sensor and recording image data representative of said scene in a recording medium, said method comprising:

- connecting said digital camera to said host computer with a high-speed serial interface;

- recognizing said digital camera as a storage driver, which records data representative of a still picture and at least one of writes said image data in and reads said image data out of the recording medium;

- recognizing said digital camera as an image device, which generates image data representative of a moving picture and reads said image data out of the image sensor at a preselected period;

- recognizing said digital camera as an operating device;

electronic conferencing said host computer with said another computer;

controlling portions of said digital camera in response to a command made from said host computer via said high-speed serial interface, to thereby control data transfer between said digital camera and said host computer and a shooting operation of said digital camera; and

performing, during said electronic conference between said host computer and said another computer, bulk transfer of image data between said digital camera and said host computer at an idle position of a transfer frame.

24. (New) A method according to claim 23, further comprising:

performing isochronous transfer of a preselected amount of moving picture data between said digital camera and said host computer every preselected frame; and

performing at least one of interrupt transfer and control transfer of said operation command between said digital camera and said host computer when polling at a preselected period.

25. (New) A computer system comprising:

a host computer for electronic conferencing with another computer;

a digital camera for picking up a scene with an image sensor and recording image data representative of said scene in a recording medium; and

a high-speed serial interface connecting said digital camera to said host computer;

said host computer comprising a device driver including:

a first device function for recognizing said digital camera as a storage driver, which records data representative of a still picture, and at least one of writing and reading said image data at least one of in and out of the recording medium;

a second device function for recognizing said digital camera as an image device, which generates image data representative of a moving picture, and reading said image data out of the image sensor at a preselected period; and

a third device function for recognizing said digital camera as an operating device and feeding an operation command to said digital camera;

said digital camera comprising a controller for driving, in response to an access made from one of said first device function, said second device function, and said third device function of said host computer via said high-speed serial interface, portions of said digital camera corresponding to said access to thereby control data transfer and a shooting operation,

wherein said high-speed serial interface includes a capability of selectively connecting said digital camera to said host computer with a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface,

wherein, when said high-speed serial interface comprises said USB serial interface, during an electronic conference between said host computer and said another computer, the image data representative of a still picture is transferred by said first device function using bulk transfer, which transfers image data at an idle position of a transfer frame, and wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said host computer and said another computer, the

image data representative of said still picture is transferred by said first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.